The Chromasette Magazine

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FEBRUARY ~~January~~ 1983

One large crocodile tear...

The huge rainstorms that plastered our lovely city have passed (for now) and we were fortunate to have had only a little damage (just a leak over Donna's desk). Did we get off easy? Not really. Rose was out for a week with exotic versions of the common cold, Donna hurt her typing hand (there's a funny dent in the wall?), I've got an eye infection along with a 3 week old cough, and Tom started working full time (oooh, I feel awful)...

Filename	English Translation	PMODE	PCLEAR	Locations CTR-80	Locations CCR-81
FLAGCOV	Flag Cover	4	4	9/153	10/167
STELLINS	Stellar Instructions	0	1	22/163	24/178
STELLEMP	Stellar Empire	(0)	(1)	35/172	38/187
SORTS	Sorts	(0)	(1)	62/192	68/209
BAR	Bar Chart	4	4	87/212	95/231
XY	XY Graph	4	4	101/227	110/263
DISKAID	Disk Aid (disk only)	0	1	123/241	134/263
FLYBY	Flyby (CLOADM:EXEC)	(2)	(4)	143/256	156/279

Locations are for R/S recorders. If the first copy of a program won't load, try the second. If neither copy loads, return the tape for disciplining and a prompt replacement. If you get an OM, FC, or SN error while loading or running a program, you probably have to enter the PMODE and PCLEAR values for the program directly from the keyboard. (Values in parenthesis are not set in the program). * These programs may use high speed. Be sure that the computer is slowed down again before doing I/O to tape or disk (POKE 65494,0).

Long may it run - or at least until you hit the <break> key. Flag Cover isn't patriotic, but it shows what a few hundred lines in a circle can be made into.

Mr. Vader would be proud - Two to four opponents vie for control of the galaxy in Stellar Empire. You send your warships to star systems based on the system's productivity, rebellious nature, distance from your base. and proximity to your opponent's bases. Read Stellar Instructions (outlined below) for a full briefing.

Notes: 1) You can have human opponents or have CoCo fill in. 2) If you only have 16k, you must type PMODE0:PCLEAR1<enter> from the keyboard before loading Stellar Empire. 3) In lines 995-1025 there is a neat little routine that automatically does a PCLEAR 0 (you can't do this directly from BASIC - the best you can do is PCLEAR 1) giving you an extra 1500 bytes of memory for the program. Oh, boy! 4) The above mentioned neat routine is not so neat on a 32k disk system (it isn't needed and it won't work anyway). So you must ignore it by changing line 5 to 5 CLS or fix it by changing line 1000 to 1000 X$="CC0E011F027E96A7".

Star map: 3 characters - class, initial, block (yellow - you control).
Classes: 1 - low income, never rebels. 2 - higher income, never rebels. 3 - higher income, rebels. 4 - highest income, rebels, home planet.
Income: In RUs. 5 RUs needed to build one starship.
Battles - Rebellions (less likely if large occupation force) or meetings (larger

force wins).

Hyperspace - Enter your star first, then destination star.

Outa' sorts? Sorts has a few for you! This tutorial describes and lists the routines for 4 different sorts (bubble, interchange, 2-array, and insertion). It also will visually demonstrate each sort on your own or the program's data! Note: If you only have 16k you must type PMODE0:PCLEAR1<enter> before loading the program.

Data in 2-D: Plot your data on the screen with Bar Chart or XY Graph. The programs are set up similarly (funny, they're written by the same author) with good error checking and goof proofing. I will describe the different features of each program first, then their similar features:

Bar Chart: (To get back to the menu from a chart, hit Q)

ENTER DATA - If you got to this option by accident, just answer N to the 'Change Data?' question. Up to 15 bars can be entered (if you have more than 32k, you can change the NB=14 in line 10 to something greater for more bars). After entering the values, you can group the bars.

CHANGE GROUP SIZE - To group bars. The group size must be a factor of your total number of groups.

LIST OR CHANGE SCALING - Offset is the value the bars start at, scale is the distance between ticks, and length is the length of the longest bar as a percentage of the full scale.

VERTICAL/HORIZONTAL - Toggle between a vertical or horizontal display.

SELECT FILL TYPE - Make bars solid, lined, or blank (initially blank).

SET MARGINS - Change the size of the left and bottom margins.

REDRAW - Clear screen and redraw chart with current data (text lost). Also choose scale ticks (edge, full, or none).

SUBROUTINE RETURN - To return to your own data generation routine for a plot. Use lines 12-998 for your routine and a GOSUB 9000: GOSUB 1000 whenever you want to draw plot. Put the bar values in A() (start with A(0)), use J to index the array, make N one larger than the the largest index value, and put the fill types (S, B, or L) in T$(). Avoid using the following variables: A$, C(), FF, G, I, JF, K, LZ, M, PC, S, SF, SI, VF, X, XM, XR, Y, YM, YR, and Z

A sample routine:

```
12 FOR J=0 TO 14.
14 A(J)=10*EXP(-(J-7)*(J-7)/20)
16 T$(J)="B": NEXT J
18 N=15
20 GOSUB 9000: GOSUB 1000
```

XY Graph: (To get back to the menu from a chart, hit Q)

ENTER OR EDIT DATA - Data should be sorted before entering (100 data pairs maximum). To change a point, give the index number. If you don't know the exact index number, approximate it and move through the points using the H or L key until you locate it. C will allow you to change the point.

CLEAR GRAPHICS - The only way to get rid of old stuff on the graphics screen (the old values are not lost, just the drawing). Must be done before starting to plot.

LIST OR CHANGE SCALES - To set the range of the X-Y plot and to set the scale ticks. To reverse an axis, set the MIN to a larger value than the MAX and the INC value to negative.

CHANGE MARGINS - Change the size of the left and bottom margins.

DRAW SCALES - Draw border (if wanted) and edge ticks or dotted scale lines.

DRAW CURVE - Choice of dashed line or solid line.

SUBROUTINE RETURN - To return to your own data generation routine for a plot. Use lines 12-998 for your routine and a GOSUB 1000 whenever you want to draw a plot. Put the XY values in XP() and YP() (start with XP(0) and YP(0)). Use I to index the array and make N equal to the largest index value. Avoid using the following variables: A$, C(), DX, DY, F3, F5, J, JF, Q$, X, XM, XR, X0, X1, X3, X4, X5, Y, YM, YR, Y0, Y1, Y3,

Y4, Y5, and Z
A sample routine:

```
12 FOR I=0 TO 99
14 XP(I)=I: YP(I)=50+50*SIN(I/7)
16 NEXT I
18 N=99
20 GOSUB 1000
```

Both Bar Chart and XY Graph: (Hit Q to return to the menu)

ADD TEXT - Add titles and labels to a graph (should be done AFTER the graph itself is finalized). The cursor is normally controlled by the arrow keys. To use the right joystick, press J. A or any other command returns you to the arrow key mode. I lets you put ONE character (letter, numeral, <space>, or ! ? $ % . - ( ) character) at the cursor location. S puts a block at the cursor location.
LIST TEXT COMMANDS - Lists the commands for ADD TEXT.
DISPLAY GRAPHICS SCREEN - Display the current graph or chart.
LIST DATA - Lists the data currently used for the graph or chart.

And now for bit of help for disk users - Disk Aid. An explanation of the commands follows:

D Directory - Similar to the normal one except the date is printed (if given) and file types are spelled out.
S Super Directory - Also prints out the file size, granule numbers, and addresses for machine language files.
P Printer ON/OFF - Uses a machine code routine to route the screen stuff to the printer also.
F File Listing - A two-column directory!
G Granule Use Table - Shows how the disk space is allocated.
A Add Date to Files - Lets you put a date (or put any 16 byte string) with any undated file in the directory. This information is only lost when the file is reSAVEd.
N Number of Default Drive - To change the drive being used by the program.
L Locations - Get start, end, and execute addresses for a machine language program.
R Recover Lost Files - To recover KILLed files or repair damaged directories (if you have the information that the Super Directory command gives you). Note: If you don't know the length of a non-machine language file to be un-KILLed, the program assumes all granules are fully occupied.
M Print Menu - Reprints full menu.
E End Program

Don't pass it by - Flyby is a cute looking game in which you try to shoot ducks (10 points), faces (25 points), and planes (50 points) as they 'fly by' on the screen. Use the left and right arrow keys to move and the spacebar to fire. The program is in machine language so to run it type CLOADM"FLYBY":EXEC<enter>. To make a copy of the program type CSAVEM"FLYBY",4000,7826,4000<enter> (use SAVEM to save to disk). Note: We noticed that the program acted funny on ONE of our CoCos if the joysticks were plugged in. We unplugged the joysticks and it worked fine.

There is no excuse...

But if anyone finds one lying around, I could use it. It's bad enough when there are bugs in a program. However, to have bugs in a bug fix given in the blue sheets is disgraceful! That huge 'fix' I published last month for December's Curve Fit had two lines missing (I can't read - the author's fixes were correct). The fix should have had the following two lines included (I really am sorry):

```
376 RETURN
378 IFM<0 THEN M=0
```

More on Curve Fit: [illegible] asked to modify it so that most screen dump programs

could send the screen to a printer. If you have 32k, you can try changing line 359 (I have not tested this):

359 PCLEAR 4:PMODE 4: GOTO 9

Let's just forget January ever happened...

We goofed (again!) and published a renumbered version of **Keep Text** last month. So, the lines I mentioned in the sheets were wrong. You can do one of two things: 1) Use the version you have now with the lines as described below, or 2) Delete line 1 of the original program and type RENUM<enter> to have a copy of the program as it was meant to be.

Printer baud rate is set in line 15.
To reenter the program after a <break> or an error, type **GOTO 7**<enter>.
Special printer routines are in lines 96 and 100-103.

The ultimate mod...

If you would like to have May 1982's **Ultimate Adventure** Save and Load routines work on disk, John Rindal of Duluth, Minnesota suggests:

Delete lines 382,384,406,408,418
Remove the - **sign** in lines 392,394,396,398,400,416,420,424,428,430
In line 416 remove the **FOR I= 1 TO 2** and in line 430 remove the **NEXT Y**

Bad news travels fast...

We are raising our prices on April 1, 1983 (no foolin' - old cliche). Our costs have gone up and we are greedy (but not too greedy). Anyway, if you wish to renew early at the old rates (you do wish to renew, don't you?), feel free. The new rates as of April 1st will be $50 for a year, $30 for six months, and $6 for back issues.

Scrooge was a spendthrift,

Dave

ed.

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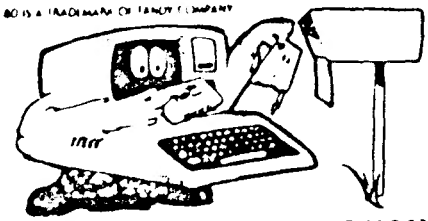

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